

PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program

Stormwater Flood Management Grant, Round 1, 2010-2011

Applicant Sonoma County Water Agency	Amount Requested	\$6,000,000
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Proposal Title Copeland Creek Enhancement and Restoration Project	Total Proposal Cost	\$12,000,000
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PROPOSAL SUMMARY

This project includes: 1) Stormwater detention of up to 200 acre-feet in up to three off-stream basins that will provide regional flood protection and 150 acre-feet or more annual groundwater recharge potential, 2) riparian habitat restoration along up to 16,000 ft, 3) removal of up to 11,000 cubic yards of sediment, re-contouring of up to 2 miles of channel bottom, and construction of sediment collection basins to detain fine sediment from roads, 4) off-channel refuge in the mid-reach of Copeland Creek to protect listed juvenile steelhead, 5) protection of water quality, 6) Increase of 75 to 90 acres of permanent preserved open space, and 7) construction of more than 6,000' of public trails and bike paths along Copeland Creek.

PROPOSAL SCORE

Criteria	Score/ Max Possible	Criteria	Score/ Max Possible
Work Plan	9/15	Economic Analysis – Flood Damage Reduction and Water Supply Benefits	9/12
Budget	3/5	Water Quality and Other Expected Benefits	3/12
Schedule	3/5	Program Preferences	8/10
Monitoring, Assessment, and Performance Measures	3/5		
Total Score (max. possible = 64)			38

EVALUATION SUMMARY

Work Plan

The criterion is less than fully addressed and rationales are incomplete or insufficient. The Work Plan does not present adequate detail, and it is not clear if the project can be implemented. The Proposal provides scientific and technical information to support the feasibility of the work items. Of particular concern are those elements having to do with groundwater recharge. The estimated recharge rate of 150 AF requires better substantiation. Three groundwater monitoring wells are proposed for the site that will help to assess the depth, lateral continuity, and thickness of the perched aquifer (which would interfere with recharge). The locations of these wells are within the site boundary which will provide limited new data, if any, as to the lateral continuity of the perched aquifer. Potential contaminants in recharge water and the attenuation

of contaminants through the formation is lacking support. No information was provided on recharge water chemistry, but reviewers note agricultural operations do exist in the area where recharge waters would be coming from. With coarse grain clayey sands and gravels might not provide adequate attenuation. It is unclear if the applicant is working with the Regional Board on this issue. A brief discussion of how the Project's goals and objects relate to the North Coast IRWM Plan is included in Attachment 2. A tabulated overview of the Project which includes an abstract and Project status is provided as are maps indicating project location. Appropriate submittals are indicated. Project design has not started and applicant is unsure of exactly how many detention basins will be constructed. Although the applicant indicates the project can be operated on a standalone basis, it should be noted that this project is dependant on the design and environmental documents that are part of the IRWM implementation grant.

Budget

The criterion is less than fully addressed and supporting documentation is lacking. For the Budget category: Land Purchase/Easement: back up documentation is not provided supporting the stated land value. Budget line items are not shown for the sub-tasks presented in the Work Plan, nor do they correspond to the task items in the Work Plan. The supporting documentation is confusing and difficult to understand. The conceptual state of the project makes it difficult to substantiate the accuracy of the budget; for example, it is not yet known exactly how many stormwater detention basins will be constructed. The Budget includes many line items that are not relevant to the project in the application and are confusing to the reviewers. The Budget section would benefit from a clearer consistent format and a better separation between Phase 1 and 2 of the project as well as the different components of Phase 2 and their funding sources.

Schedule

The Schedule is not entirely consistent and reasonable. For example, Field Implementation for the Habitat Restoration component is identified on the Schedule to begin in February 2012; however, the Work Plan has a start date of April 2012. The Schedule does not indicate task numbers as are indicated in the Work Plan. The start and end dates for some tasks do not completely correspond between Work Plan and Schedule.

Monitoring, Assessment, and Performance Measures

The criterion is less than fully addressed and documentation or rationales are incomplete and insufficient. The target to increase groundwater recharge identified under Water Conservation, Supply Reliability Enhancement, and Recycling is likely not feasible within the life of the project. Stabilization or increasing groundwater levels within the intermediate or deep aquifers is also questionable. The target to increase base flow in the alluvial reach of Copeland Creek is not discussed in the Work Plan. No documentation is provided that any increase in base flow can be achieved. Table includes a goal, "Ensure adequate water supply while minimizing environmental impacts", that is related to a subsequent phase of the project not included in the application. The project is consistent with the Basin Plan.

Economic Analysis – Flood Damage Reduction (FDR) and Water Supply Benefits

High levels of FDR and water supply benefits can be realized through this proposal; however, the quality of the analysis is partially lacking and/or supporting documentation is partially unsubstantiated. In particular, no inundation map is provided. An inundation map is needed to verify the expected annual damages. Flood depths, and the with-project reduction, appear to be based on anecdotal information. A higher score would have been awarded if the applicant used modeled water profiles for Copeland Creek to determine the flood depths for the various flood events. Total NPV of costs is \$8.403 million. FDR claimed benefits are \$13.676

million, more than costs. Water supply claimed benefits are \$0.858 million. Most of the water supply benefit is an avoided cost of flood control facilities, not a water supply benefit that cannot be counted above and beyond FRAM benefits.

Economic Analysis – Water Quality and Other Expected Benefits

Only low levels of water quality and other benefits can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Water quality and other claimed benefits are \$1.982 million. These include habitat restoration, water quality, and recreation. However, the \$1.982 cannot be verified because Table 19 includes no dollar values.

Program Preferences

The proposal demonstrates with a significant degree of certainty that a number of Program Preferences can be achieved by implementing the proposed project. Thorough documentation with breadth and magnitude is provided for the following Program Preferences: Regional Projects or Programs; Effectively Integrate Water Management with Land Use Planning; Expand Environmental Stewardship; and Practice Integrated Flood Management.